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APPLICATION N	NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,314		08/17/2001	James Kenneth Aragones	RD-28217	2332
6147	7590	03/14/2005	•	EXAMINER	
0		CTRIC COMPANY	CRAIG, DWIN M		
GLOBAL RESEARCH PATENT DOCKET RM. BLDG. K1-4A59			59	ART UNIT	PAPER NUMBER
NISKAY	NISKAYUNA, NY 12309			2123	
				DATE MAILED: 03/14/2005	5 -

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/682,314	ARAGONES ET AL.				
Office Action Summary	Examiner	Art Unit				
· .	Dwin M Craig	2123				
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the o	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tir ly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed /s will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 17.4	August 2001.					
<u> </u>	s action is non-final.					
3) Since this application is in condition for allowa	· <u> </u>					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-93 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)☐ Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>17 August 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)☐ Acknowledgment is made of a claim for foreigr a)☐ All b)☐ Some * c)☐ None of:	n priority under 35 U.S.C. § 119(a)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ∑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail D 5) Notice of Informal F	ate Patent Application (PTO-152)				
Paper No(s)/Mail Date 10/9/2001.	6) Other:	· · · · · · · · · · · · · · · · · · ·				
L U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Office A	ction Summary	Part of Paper No./Mail Date 6				
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DETAILED ACTION

1. Claims 1-93 have been presented for Examination. Claims 1-93 have been Examined and rejected.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-93 are provisionally rejected under the judicially created doctrine of double patenting over Claims 1-33 of copending Application No. 10/707,656. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

As an example, the Examiner will now map the limitations of Claims 1, 4 & 5 of Patent Application 09/682,314 with independent Claim 1 of co-pending Patent Application 10/707,656.

2.1 Claim 1 of U.S. Patent Application 09/682,314 reads in part, a system for performing baseline modeling comprising: an engine service database that contains engine data.

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Which is functionally equivalent to, an engine baseline modeling component that builds an engine baseline model...and an engine service database containing engine data as claimed in Claim 1 of co-pending U.S. Patent Application 10/707,656.

- 2.2 Claim 1 of U.S. Patent Application 09/682,314 reads in part, a preprocessor for processing the engine data into a predetermined format. Which is functionally equivalent to, a preprocessor for processing the engine data into a predetermined format as claimed in Claim 1 of co-pending U.S. Patent Application 10/707,656.
- 2.3 Claim 4 of U.S. Patent Application 09/682,314 reads, the <u>preprocessor</u> comprises a <u>data segmenting</u> component that segments the engine data into <u>a plurality of groups</u>. Which is functionally equivalent to, wherein the <u>preprocessor</u> includes a <u>data segmenting</u> component that segments the engine data into <u>a plurality of groups</u> as claimed in Claim 1 of co-pending U.S. Patent Application 10/707,656.
- 2.4 Claim 5 of U.S. Patent Application 09/682,314 reads, wherein the engine baseline model is a <u>regression</u> model. Which is functionally equivalent to, using a <u>regression</u> analysis as claimed in Claim 1 of co-pending U.S. Patent Application 10/707,656.
- 2.5 Claim 1 of U.S. Patent Application 09/682,314 reads, that builds an engine baseline model from preprocessed data, wherein the engine baseline model relates engine performance variables as a function of engine operating conditions. Which is functionally equivalent to, wherein the engine baseline model relates engine performance variables as a function of engine operating conditions, as claimed in Claim 1 of co-pending U.S. Patent Application 10/707,656.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3. Claims 1-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinstock et al. U.S. Patent 6,223,143 in view of Aragones et al. U.S. Patent 6,799,154 and in further view of Keeler et al. U.S. Patent 6,243,696.
- 3.1 For example, as regards Independent Claim 1 and dependent Claims 2-8 the Weinstock et al. reference discloses building/generating a baseline model (Figure 1 item 18-3, Figure 3 item S20, Figure 16 item S1102, Col. 3 lines 13-22, Col. 9 lines 62-67, Col. 10 lines 1-13, Col. 20 Lines 16-24, Col. 24 lines 22-39), using an aircraft engine model (Col. 22 Lines 23-54), and preprocessing the data (Col. 10 Lines 46-62), using a database (Col. 5 lines 63-67, Col. 6 Lines 1-5) using regression analysis (Col. 11 Lines 54-59, Col. 28 Lines 34-37) and grouping the resulting data (Col. 21 Lines 5-22).

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However, the Weinstock et al. reference does not expressly disclose using a service history database or cleaning the data.

The Argones et al. reference discloses, using a service history database (Figure 2 Item 40, Col. 6 Lines 34-49, Col. 3 Lines 36-67, Col. 4 Lines 1-6), performing diagnostics (Figure 4 item 72), all for the purpose of maintaining an aircraft engine (Col. 4 Lines 66-67, Col. 5 Lines 1-19), it is further noted by the Examiner that this same reference discloses regression testing (Col. 8 Lines 28-37). However, it is also noted that both the Weinstock et al. and Argones et al. references do not expressly disclose cleaning data.

The Keeler et al. reference discloses cleaning data (Figures 7a-7e, Col. 3 Lines 23-25), the Keeler et al. reference also discloses building/generating a model (Figure 38 and Figure 39 item 486), using a database (Figure 38 items 450 & 452).

The Examiner notes that, all three cited references are related to creating/building models and manipulating data in a data base to help generate or use that model.

Thus, it would have been obvious, to one of ordinary skill in the model generating art, at the time the invention was made to have used the methods disclosed in the *Argones et al.* and *Keeler et al.* reference(s) in combination with the model building/generation methods of the *Weinstock et al.* reference because, by cleaning the data and then further using a service history database, a generated model can be made more accurate and allow for better risk management (*Argones et al.* Col. 1 Lines 54-61).

Conclusion

4. Claims 1-93 have been Examined and rejected. This Office Action is NON-FINAL.

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4.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on (571)272-3716. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC

